



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/568,411	02/14/2006	Masako Ueno	286171US0PCT	7547
22850 7590 03/16/2010 OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, L.L.P. 1940 DUKE STREET ALEXANDRIA, VA 22314				
EXAMINER BARHAM, BETHANY P				
ART UNIT 1615		PAPER NUMBER		
NOTIFICATION DATE 03/16/2010		DELIVERY MODE ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com  
oblonpat@oblon.com  
jgardner@oblon.com

# Office Action Summary

**Application No.**

10/568,411

**Applicant(s)**

UENO, MASAKO

**Examiner**

BETHANY BARHAM

**Art Unit**

1615

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10 September 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) 5-7 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4, 8 and 9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SI/08)  
Paper No(s)/Mail Date 2/14/06, 09/10/09.

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date: \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Summary***

Receipt of IDS filed on 02/14/06 and 09/10/09 is acknowledged. Applicant's response filed on 09/10/09 is also acknowledged. Claims 1-9 are pending.

### **Election/Restrictions**

Applicant's election with traverse of Group II in the reply filed on 09/10/09 is acknowledged. Applicants argue that the office is wrong in alleging that Groups I and II do not relate to a single general inventive concept.

The Examiner respectfully points out that the reason for the separate groups I-III drawn to the product claims and process of preparation claims is due to the fact that there is a common technical feature in claim 1 and claim 5 (no special technical feature): as stated in the Restriction requirement the common feature is an oil-in-water emulsions forming a hair cosmetic that contain A, B and C and that mixtures of high MW dimethylpolysiloxanes with low MW and/or cyclic dimethylpolysiloxanes, as pointed out US 6,251,379 teaches oil-in-water emulsions forming a hair cosmetic that contain A, B and C and that mixtures of high MW dimethylpolysiloxanes with low MW and/or cyclic dimethylpolysiloxanes is known, but specifically discloses high MW methylpolysiloxane, etc. Further, US 5,304,334 teaches the method of making an emulsion comprising DC Q2-1403 (comprising high and low MW dimethylsiloxanes) and DC Q2 3225C (cyclomethicone/dimethicones).

However, that said all product claims (even product-by-process) will be examined together (groups I and II) and only the process for preparation (group III) will remain withdrawn. As such, claims 5-7 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected species and invention, there being no allowable generic or linking claim. Claims 1-4 and 8-9 will be examined in the instant application. Applicant timely traversed the restriction (election) requirement in the reply filed on 09/10/09. The requirement is still deemed proper and is therefore made FINAL.

#### **NEW REJECTIONS**

##### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

Claim 1 and dependent claims thereon are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 1 is directed to "an oil-in-water type". What is type? The phrase "an oil-in-water type" is not defined in the instant specification and it is vague and indefinite. Is it a gel, cream, spray, etc? Please clarify. For the purpose of examination any oil-in-water emulsion hair composition meets the limitations of the claims.

##### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

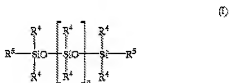
A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4 and 8-9 are rejected under 35 U.S.C. 102(e) as being anticipated by US 6,251,379 ('379).

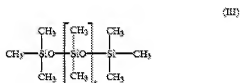
The instant claims are drawn to an oil-in-water type hair cosmetic composition obtained by dispersing, in an aqueous phase containing an emulsifier, droplets of a mixture of the below- described Components (A) and (B) and droplets of a mixture of the below-described Components (A) and (C)...

- '379 teaches a hair cosmetic composition in the form of a oil-in-water emulsion that contains a silicone derivative component and an emulsifier such as polyoxyalkylene glycol ether or cationic quaternary ammonium compound (which are taught in the instant specification to be emulsifiers [0023-0027] (abstract, col. 11, line 10; col. 10, line 58; col. 4, lines 40-col. 6, lines 35; claim 1). '379 teaches high molecular weight dimethylpolysiloxanes (formula I; instant A) and



wherein R<sup>4</sup> represents a methyl group or a phenyl group (not all R<sup>4</sup> represents a phenyl group), R<sup>5</sup> represents a methyl group or a hydroxyl group, and n represents an integer of 3,000–20,000; and

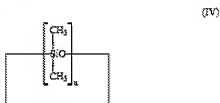
- linear dimethyl silicone oils (formula III, instant B) and cyclic silicone oils such as octamethylcyclotetrasiloxane (formula IV, instant C) and mixtures thereof (col. 7, lines 33-40, 63-67; col. 8, lines 1-12 and 39-50; col. 9, line 54-col. 10, line 40).



wherein t represents an integer of 0-650.

Examples of such linear silicone oil include dimethylpolysiloxane (viscosity: 0.65-5 mPa·s/25° C.).

The aforementioned cyclic silicone oil may be represented by formula (IV):

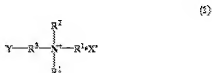


wherein u represents an integer of 3-7.

Examples of such cyclic silicone oil include octamethylcyclotetrasiloxane, decamethylcyclopentasiloxane, and tetradecanethylcyclohexasiloxane.

According to '379 the highly polymerized methylpolysiloxanes (formula I, instant A) must be first dissolved in a volatile oil of Formula III (instant B) and IV (instant C) prior to making the emulsion (col. 9, line 54-60 and col. 10, line 37-39) (meeting the limitations of claims 1-2).

- '379 teaches a quaternary ammonium compounds (formula 1) of instant claims 3-4:



(col. 4, lines 40-col. 6, lines 35; claim 3).

- '379 teaches including higher alcohols (col. 10, lines 56-57) (according to the limitations of claims 8-9).

***Claim Rejections - 35 USC § 103***

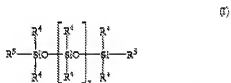
The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4 and 8-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 5,788,884 ('884) .

- '884 teaches a novel aqueous organopolysiloxane emulsion composition of oil-in-water type suitable for hair care in which the organopolysiloxane particles are emulsified by a quaternary ammonium chloride cationic surface active agent.
- '884 teaches that the organopolysiloxane particles are mixed with the quaternary ammonium chloride cationic surface active agent with a small amount of water, vigorously agitating the mixture to cause a oil-in-water base emulsion that is then diluted with an additional amount of water (abstract; col. 2, lines 3-62; col. 3, line 61-col. 4, line 30).
- According to '884 it is preferable that the organopolysiloxane be a mixture of at least two organopolysiloxane with different viscosities and specifically combination of a high molecular weight dimethylpolysiloxanes with two of organopolysiloxanes of a low molecular weight such as a cyclic or linear molecular structure (col. 3, lines 19-40).

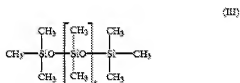
- '884 does not teach the number average polymerization degree for the high molecular weight, low molecular weight and cyclic dimethylpolysiloxanes, but does teach their viscosity range.
- '379 is taught above '379 teaches high molecular weight dimethylpolysiloxanes (formula I; instant A) and



wherein  $R^4$  represents a methyl group or a phenyl group (not all  $R^4$  represents a phenyl group),  $R^5$  represents a methyl group or a hydroxy group, and  $n$  represents an integer of 3,000–20,000; and

- linear dimethyl silicone oils (formula III, instant B) and cyclic silicone oils such as octamethylcyclotetrasiloxane (formula IV, instant C) and mixtures thereof (col. 7, lines 33-40, 63-67; col. 8, lines 1-12 and 39-50; col. 9, line 54-col. 10, line 40).

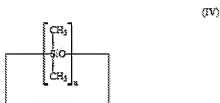




wherein t represents an integer of 0-650.

Examples of such linear silicone oil include dimethylpolysiloxane (viscosity: 0.65-5 mPa·s/25° C.).

The aforementioned cyclic silicone oil may be represented by formula (IV):



wherein u represents an integer of 3-7.

Examples of such cyclic silicone oil include octamethylcyclotetrasiloxane, decamethylcyclopentasiloxane, and tetradecanethylcyclohexasiloxane.

- According to '379 the high molecular weight dimethylpolysiloxanes (formula I, instant A) must be first dissolved in a volatile oil of Formula III (instant B) and IV (instant C) prior to making the emulsion (col. 9, line 54-60 and col. 10, line 37-39) (meeting the limitations of claims 1-2).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine '884 and '379. A skilled artisan would know how to substitute via simple substitution the general high molecular weight dimethylpolysiloxane, low molecular weight and cyclic dimethylpolysiloxanes of '379 with the specific high molecular weight dimethylpolysiloxane, low molecular weight and cyclic dimethylpolysiloxanes that teach the number average polymerization degree with predictable results. Simple substitution of known high molecular weight

dimethylpolysiloxane, low molecular weight and cyclic dimethylpolysiloxanes for another is within the purview of the skilled artisan and would yield predictable results.

### ***Correspondence***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bethany Barham whose telephone number is (571)-272-6175. The examiner can normally be reached on Monday to Friday; 8:30 a.m. to 5:00 p.m. EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert A. Wax can be reached on (571)272-0623. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>.

Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Bethany Barham  
Art Unit 1615

/S. TRAN/  
Primary Examiner, Art Unit 1615